

## Data sheet

SM 022 (022-1BB70)

## Technical data

Order no.	022-1BB70
Туре	SM 022
Module ID	0F41 57E1
General information	
Note	-
Features	2 outputs Time stamp Output current 0.5 A
Current consumption/power loss	
Current consumption from backplane bus	85 mA
Power loss	0.95 W
Technical data digital outputs	
Number of outputs	2
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	DC 20.428.8 V
Current consumption from load voltage L+ (without load)	15 mA
Total current per group, horizontal configuration, 40°C	1 A
Total current per group, horizontal configuration, 60°C	1 A
Total current per group, vertical configuration	1 A
Output current at signal "1", rated value	0.5 A
Output delay of "0" to "1"	max. 100 ns
Output delay of "1" to "0"	max. 100 ns
Minimum load current	-
Lamp load	10 W
Parallel switching of outputs for redundant control of a load	not possible
Parallel switching of outputs for increased power	not possible
Actuation of digital input	✓
Switching frequency with resistive load	max. 40 kHz
Switching frequency with inductive load	max. 40 kHz
Switching frequency on lamp load	max. 40 kHz
Internal limitation of inductive shut-off voltage	L+ (-52 V)
Short-circuit protection of output	yes, electronic, and only highside
Trigger level	2.5 A
Number of operating cycle of relay outputs	-
Switching capacity of contacts	-
Output data size	60 Byte
Status information, alarms, diagnostics	
Status display	green LED per channel
Interrupts	no
Process alarm	no



Di	no A YASKAWA COMPANY
Diagnostic interrupt	110
Diagnostic functions	no
Diagnostics information read-out	possible
Supply voltage display	green LED
Group error display	red LED
Channel error display	none
Isolation	
Between channels	•
Between channels of groups to	
Between channels and backplane bus	✓
Insulation tested with	DC 500 V
PWM data	
PWM channels	-
PWM time basis	-
Period length	-
Minimum pulse width	-
PtP communication	-
Safety	
Safety protocol	
Safety requirements	
Secure user address	
Watchdog	
Two channels	
Test pulse length	
Circuit monitoring	
Circuit Monitoring	
Datasizes	
Input bytes	4
Output bytes	20 / 60
Parameter bytes	6
Diagnostic bytes	20
Housing	
Material	PPE / PPE GF10
Mounting	Profile rail 35 mm
Mechanical data	
Dimensions (WxHxD)	12.9 mm x 109 mm x 76.5 mm
Weight	60 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL508 certification	yes